

Remarks

Claims 2, 4-7, 9, 12-20, and 24-28 are now pending in the present application.

Allowable Subject Matter

Examiner Devore is sincerely thanked for indicating that claims 2, 9, 12, 13, 16, 18-20, and 25-27 contain allowable subject matter.

Claim Rejections

Claims 4-7, 14, 15, 17, 24, and 28 are finally rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Application Publication No. 2004/0161282 to Bolton (hereinafter “Bolton”). Applicant respectfully traverses these rejections for at least the following reasons.

Claim 4 recites a mixing region connected to the first and second openings and the first writing tip and configured to substantially homogeneously mix the first and second fluids and dispense the substantially homogeneously mixed fluid to the first writing tip. Bolton does not disclose, teach, or suggest the mixing region as claimed in claim 4.

Bolton discloses a marker pen having two nibs 14, 25 that are separated from each other, “thereby avoiding any contamination between the liquids of the respective nibs.” (Fig. 1 and Paragraph [0051].) In another embodiment, “the spacing between nibs 14, 25 is essentially provided by an impermeable sheath 32.” (Fig. 4 and Paragraph [0053].) Bolton does not disclose a mixing region connected to first and second openings of fluid reservoirs and the first writing tip and configured to substantially homogeneously mix the first and second fluids and dispense the substantially homogeneously mixed fluid to the first writing tip, as required by claim 4 of the present application. If Bolton discloses a region in which fluids are mixed, it would be the writing surface itself: “In use, movement of the nibbed end of the marker pen over a writing surface causes the eradicating solution dispersed [to the writing surface] by the nib 25 to react chemically

with the coloured ink already dispensed by the annular nib 14...”. (Paragraph [0073].) However, such a writing surface is not connected to first and second openings of fluid reservoirs and the first writing tip and configured to substantially homogeneously mix the first and second fluids and dispense the substantially homogeneously mixed fluid to the first writing tip. Bolton simply does not disclose, teach, or suggest the mixing region as claimed in claim 4. Therefore, claim 4, and all claims dependent therefrom, are believed to be patentable over Bolton. Withdrawal of the rejections is respectfully requested.

Claim 15 recites that the first and second chemicals are chemically reactive and solidify into a solid product upon chemically reacting. One example disclosed in the specification is the reaction between a fluid resin and a fluid hardener, which solidify into a solid product upon chemically reacting.

Bolton discloses “a solution of an eradicating medium which reacts chemically with the dye of the indicator ink to change its pH and therefore the colour of the indicator ink dye.” (Paragraph [0073].) Bolton does not disclose, teach, or suggest that the eradicating medium and the indicator ink solidify into a solid product upon chemically reacting. Many conventional inks comprise solutions that become “solid” over time due to evaporation of their solvents and depositing of their solid dye solutes. However, such an effect is due to evaporation, not a chemical reaction resulting in a solid product. Thus, even if Bolton’s inks may become “solid” over time, Bolton fails to disclose, teach, or suggest first and second chemicals that are chemically reactive and solidify into a solid product upon chemically reacting. Therefore, claim 15, and all claims dependent therefrom, are believed to be patentable over Bolton. Withdrawal of the rejections is respectfully requested.

Response to Examiner’s “Response to Arguments”

The Office Action asserts that “it is the embodiment shown on Figure 14 that discloses such a mixing region.” Applicant heartily disagrees. According to Bolton, paragraphs [0064] and [0065]:

The marker pen shown in FIG. 14 differs from the previous embodiments [in which nibs 14, 25 are separated from each other] in that the transorbs 8, 21 are positioned side-by-side, rather than coaxially or in-line. In the FIG. 14 embodiment, the casing 1 has two entirely separate compartments 51, 52 of circular cross-section... each transorb comprises a fibrous mass in the form of a solid cylinder rather than an annulus. The outer nib 8 is generally of frustoconical shape and is hollowed to enable the inner nib 25 to protrude therethrough [thus preventing contact between the nibs]... Thus fluid retained within the fibrous mass of the transorb 8 can flow by capillary action via the platform 53 to the nib and thence to the nib tip...

The end of the nib 25 remote from its tip protrudes into the fluid containing fibrous mass present in transorb 21... [Emphasis added.]

In other words, the embodiment of Fig. 14 differs from previous embodiments only in that transorbs 8, 21 are side-by-side, not axial. However, the separation between the nibs is maintained in Fig. 14 (as well as all other disclosed embodiments). Thus, Bolton does not disclose, teach, or suggest the mixing region as claimed in claim 4. Claim 4, and all claims dependent therefrom, are believed to be allowable over Bolton.

Next, the Office Action asserts that “the chemical reaction [in Bolton] followed by solidification that occurs during use of the Bolton device [due to physical evaporation] reads on the limitation that the chemicals solidify upon chemical reaction, regardless of whether or not the solidification is a result of the chemical reaction.” Again, Applicant strongly disagrees.

During patent prosecution, claims must be given their broadest reasonable interpretation consistent with the specification. MPEP 2111. (Emphasis added.) Further, “limitations are to be interpreted in light of the specification in giving them their ‘broadest reasonable interpretation’.” *In re Marosi*, 710 F.2d 799, 802. Finally, “the general meanings gleaned from reference sources, such as dictionaries, must always be compared against the use of the terms in context, and the intrinsic record must always be

consulted to identify which of the different possible dictionary meanings is most consistent with the use of the words by the inventor." MPEP 2111.01, summarizing *Ferguson Beauregard/Logic Controls v. Mega Systems*, 350 F.3d 1327, 1338. (Emphasis added.)

The meaning of the word "upon" is presently disputed. On page 11, lines 10-13 of the present application, the meaning of the word "upon" that is most consistent with its use by the Inventor is exemplified: "The first and second chemicals may solidify into a solid product upon chemically reacting. For example, the first chemical could be a resin... and the second chemical could be a hardener or curing agent. Typically, an adhesive resin is one which, when admixed with a hardener or curing agent, will react at room temperature to form an insoluble, thermoset product." (Emphasis added.) Further, page 13, lines 4-6, state, "For example, assume that the first fluid 8 comprises a resin and the second fluid 12 comprises a hardener and black dye, chosen such that the resin and hardener harden within 24 hours upon mixing..." (Emphasis added.) According to an electronic search, the word "upon" appears 22 times in the specification, each time followed by "dispensing," "reacting," "mixing," "application of heat," or a derivative. Further, in all such cases, "X happens upon Y" implied that Y caused X. The word "upon" was clearly used by the Inventor to indicate causation.

According to BrainyDictionary.com (copy attached), "upon" means "on," and "on" has many definitions, including "by means of," "indicating dependence," "conveying some notion of cause," and "in consequence of"... in other words – causation. A definition of "upon" that involves causation is the only reasonable interpretation consistent with the specification. MPEP 2111. Further, among the different possible dictionary meanings, those involving causation are the most consistent with its use by the inventor. MPEP 2111.01. For example, consider the above example in which an adhesive resin and a hardener "solidify into a solid product upon chemically reacting." Clearly, "upon" was used by the Inventor to mean that the chemical reaction between the resin and hardener causes them to solidify into a solid product. No other interpretation or meaning of the word "upon" would make sense or be consistent with its use by the Inventor.

Therefore, the recitation in claim 15 that the first and second chemicals are chemically reactive and solidify into a solid product upon chemically reacting necessarily implies, by the best interpretation and the only reasonable interpretation of “upon” consistent with the specification, that the chemical reaction between the first and second chemicals causes them to solidify into a solid product.

Bolton does not teach, suggest, or disclose, nor does the Office Action contend such, that the eradicating medium and the indicator ink solidify into a solid product upon chemically reacting – i.e., that the chemical reaction between the eradicating medium and the indicator ink causes them to solidify. Therefore, claim 15, and all claims dependent therefrom, are believed to be allowable over Bolton.

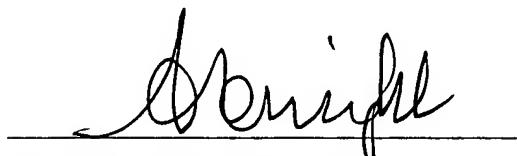
Finality of the Office Action

The finality of the Office Action is respectfully traversed. If the Examiner believes that a minor clarifying amendment to claim 15 (e.g., explicitly including the word “cause” or a derivative) would promote prosecution of this case, Applicant would be willing to consider such an amendment only if the Examiner is willing to enter the amendment into the present case (i.e., without the need for a costly RCE). Applicant respectfully maintains that the present application is allowable over Bolton even without such an amendment, and that the finality of the present Office Action is in error.

Conclusion and Fees

Because Applicant has paid for 20 claims and 3 independent claims, and because there are now 20 claims and 3 independent claims pending, Applicant believes that no fee is due. Applicant believes that all outstanding issues have been resolved, and respectfully requests a Notice of Allowance. If Examiner Devore believes that a telephone conference will further prosecution of the present case, he is invited to contact Applicant at the number indicated below.

Respectfully,



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9/9/05

Date